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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO

EXAMINER	
ART UNIT	PAPER NUMBER

20

DATE MAILED:

This is a communication from the examiner in charge of your application
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

✓ Responsive to communication(s) filed on 12/23/98

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

✓ Claim(s) 1-27 is/are pending in the application.

Of the above, claim(s) 1-5, 11-17, 20-21, 24, and 27 is/are withdrawn from consideration.

Claim(s) _____ is/are allowed.

✓ Claim(s) 6-10, 18-19, 22-23, 25-26 is/are rejected.

Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is approved disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) _____

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of Reference Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s)

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

-- SEE OFFICE ACTION ON THE FOLLOWING PAGES --

Claims 1-27 are pending in this application. Claims 1-5, 11-17, 20-21, 24, and 27 stand withdrawn from further consideration.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 6-8, 18-19, 22-23, and 25-26 are rejected under 35 U.S.C. 112, first paragraph.

This rejection is maintained for the reasons of record.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6-10, 18-19, 22-23, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's discussion of the prior art in view of Denboer ("Inside Today's Leading Edge Microprocessors," Semiconductor International, 2/1994). This rejection is maintained for the reasons of record.

Response to Remarks

With respect to the enablement rejection, applicant argues that the claims need not be limited to a specific example. The examiner's position is not that the claims must be limited to a specific example, but rather that the claims must be limited to what applicant has enabled. Applicant points to cases where a claim broader than the disclosed examples was permitted. In such cases, however, the breadth of the claim was permissible due to the level or ordinary skill in the art. In the instant case, it has been applicant's position that the claimed memory cell density is beyond the level of ordinary skill in the art; that is, one skilled in the art cannot make a structure with the claimed density without the use of applicant's disclosure. If that is the case, then the level of ordinary skill in the art cannot satisfy the enablement requirement for that portion of applicant's claimed scope which is beyond that enabled by applicant. The examiner maintains that the specification does not enable any person skilled in the art to make the invention commensurate in scope with the claims.

With respect to the 103(a) rejection, applicant argues that the prior art does not teach the claimed density, and so the rejection is based on hindsight. The examiner maintains that increasing the density of memory cells in such a structure is obvious in light of applicant's discussion of the prior art at page 2 of the specification. With respect to the combination of Denboer and applicant's admissions regarding 16M chips, the examiner maintains the properness of the combination. Applicant discusses 16M chips as well as the industry desire to increase memory density in the *Background of the Invention*. Meanwhile, Denboer reviews various new

chips and observes that the smallest chip within the group discussed includes five conductive layers. The examiner maintains that one skilled in the art producing 16M chips with the desire to make them smaller would be led to the use of five conductive layers given Denboer's discussion.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Kelley whose telephone number is (703) 305-3789. The fax phone number for this Group is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

N. Kelley

March 2, 1999